

I claim:

1. A device making use of heated fluid to reduce dust products in a waste gas pipeline installed on a pipeline between a vacuum pump and a local scrubber comprising:
 - 5 a chamber;
 - a heater whose one end has a heating pipe extending into said chamber;
 - a gas injection pipe disposed on said chamber for injecting gas into said chamber;
 - an exhaust pipe disposed on said chamber for exhausting gas carrying away
- 10 heat of said heating pipe out of said chamber,;
 - a connection pipe installed on said pipeline, an open groove being annularly disposed on said connection pipe;
 - a U-shaped gas guide ring with a wedged guide wall disposed on its inner sidewall, said U-shaped gas guide ring being sleeved onto said connection pipe,
- 15 said wedged guide wall and said one sidewall of said open groove forming a gas flow slit, an insertion hole of said exhaust pipe for connecting said exhaust pipe being formed on said U-shaped gas guide ring so that gas can be injected from said chamber into said connection pipe; and
- 20 a top lid installed on said U-shaped gas guide ring to seal said U-shaped gas guide ring.

2. A device making use of heated fluid to reduce dust products in a waste gas pipeline as claimed in claim 1, wherein a plurality of gas guide walls are further disposed in said chamber.
3. A device making use of heated fluid to reduce dust products in a waste gas pipeline as claimed in claim 2, wherein said gas guide walls are made of

material with a good heat isolation characteristic like mica and aluminum dioxide.

4. A device making use of heated fluid to reduce dust products in a waste gas pipeline as claimed in claim 1, wherein gas used in said device is a gas that won't easily explode after heated like nitrogen, clean air or argon.
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5. A device making use of heated fluid to reduce dust products in a waste gas pipeline as claimed in claim 1, wherein male and female threads can further be formed on the surface of said exhaust pipe and said insertion hole of said exhaust pipe.
- 10 6. A device making use of heated fluid to reduce dust products in a waste gas pipeline as claimed in claim 1, wherein the angle of said wedged guide wall is 45 degrees.